

Designing Walls (Advanced) Instrument

Reliability Report

Scales for the Advanced version of the Designing Walls (WA) instrument were constructed using 266 students completing post-assessments (version 3/4/2010). An “All” scale was calculated by summing correct answers on the 34 questions. This scale was tested for internal reliability and found to have a Cronbach’s α of .727 ($n=239$) for the post-assessments. Questions 1, 5, 10, 24, 25, and 30 were dropped for their negative impacts on reliability, and the new “All” scale (consisting of the remaining 28 items) had a Cronbach’s α of .768 ($n=244$). Scales for the WA (Advanced) instrument are presented in the table below.

Scale	N of Students	# Items	Items	Reliability: Cronbach’s α
All	244	28	1-4, 6-9, 11-23, 26-29, 31-34	.768
Science	249	20	3, 4, 6, 7, 9, 11, 12, 14-16, 18-23, 27, 28, 32, 33	.726